

WHAT IS CLAIMED IS:

1. A method of generating optimized platform location sets, comprising:
selecting a set of platform locations;
determining additional platform locations to add to the set of platform locations; and
determining an optimum location for each platform location in the set of platform locations.
2. The method of claim 1, wherein determining the additional platform locations includes validating the additional platform locations.
3. The method of claim 1, wherein determining additional platform locations to add to the set of platform locations includes adding the additional platform locations to the set and determining whether the additional platform locations are desirable, based on at least one of a maximum target limit, a drilling distance, and one or more target values associated with the additional platform locations.
4. The method of claim 3, wherein determining additional platform locations to add to the set of platform locations includes applying at least one multiplier to approximate an average number of targets to assign to each of the additional platform locations, receiving a user-supplied number of slots for each of

the additional platform locations, and determining a maximum target limit for each of the additional platform locations.

5. The method of claim 1, wherein optimizing the platform location set includes:

- (a) setting a step-out distance equal to a fraction of a platform reach;
- (b) moving each of the additional platform locations in the set in eight compass directions, and if a new location is better than an original location, moving each of the additional platform locations to a new location; and
- (c) executing step (b) until new locations for each of the additional platform locations are no longer achieved; and
- (d) executing steps (a) through (c) progressively decreasing the step-out distance until a more desirable set of platform locations are no longer achieved.

6. The method of claims 5, wherein the step-out distance is reduced by a predetermined amount for each execution of Step (d).

7. A computer-readable medium having computer-executable instructions for performing stages, comprising:

- selecting a set of platform locations;
- determining additional platform locations to add to the set of platform locations; and

determining an optimum location for each platform location in the set of platform locations.

8. The computer-readable medium of claim 7, wherein determining additional platform locations includes validating the additional platform locations.

9. The computer-readable medium of claim 7, wherein determining additional platform locations to add to the set of platform locations includes adding the additional platform locations to the set and determining whether the additional platform locations are desirable, based on at least one of a maximum target limit, a drilling distance, and one or more target values associated with the additional platform locations.

10. The computer-readable medium claim 9, wherein determining additional platform locations to add to the set of platform locations includes applying at least one multiplier to approximate an average number of targets to assign to each of the additional platform locations, receiving a user-supplied number of slots for each of the additional platform locations, and determining a maximum target limit for each of the additional platform locations.

11. The computer-readable medium of claim 7, wherein optimizing the platform location set includes:

(a) setting a step-out distance equal to a fraction of a platform reach;

(b) moving each of the additional platform locations in the set in eight compass directions, and if a new location is better than an original location, moving each of the additional platform locations to a new location; and

(c) executing step (b) until new locations for each of the additional platform locations are no longer achieved; and

(d) executing steps (a) through (c) progressively decreasing the step-out distance until a more desirable set of platform locations are no longer achieved.

12. The computer-readable medium of claims 11, wherein the step-out distance is reduced by a predetermined amount for each execution of Step (d).

13. A computer system, comprising:

a user interface;

memory storage means;

a processor coupled to the user interface and the memory storage means, the processor operable to:

select a set of platform locations;

determine additional platform locations to add to the set of platform locations; and

determining an optimum location for each platform location in the set of platform locations.

14. The computer system of claim 13, wherein the processor determines the additional platform locations by validating the additional platform locations.

15. The computer system of claim 13, wherein the processor determines the additional platform locations to add to the set of platform locations by adding the additional platform locations to the set and determining whether the additional platform locations are desirable, based on at least one of a maximum target limit, a drilling distance, and one or more target values associated with the additional platform locations.

16. The computer system of claim 15, wherein the processor determining the additional platform locations to add to the set by applying at least one multiplier to approximate an average number of targets to assign to each of the additional platform locations, receiving a user-supplied number of slots for each of the additional platform locations, and determining a maximum target limit for each of the additional platform locations.

17. The computer system of claim 13, wherein the processor optimizes the platform location set by performing the steps of:

- (a) setting a step-out distance equal to a fraction of a platform reach;
- (b) moving each of the additional platform locations in the set in eight compass directions, and if a new location is better than an original location, moving each of the additional platform locations to a new location; and

(c) executing step (b) until new locations for each of the additional platform locations are no longer achieved; and

(d) executing steps (a) through (c) progressively decreasing the step-out distance until a more desirable set of platform locations are no longer achieved.

18. The computer system of claim 17, wherein the processor reduces the step-out distance by a predetermined amount for each execution of Step (d).